

What is claimed is:

1. A vehicle navigation server comprising:
 - a travel route calculating device for calculating at least one proposed travel
 - 5 route of a vehicle based on data input by a registrant to the server, the data including a current or start position and a destination of the vehicle;
 - a map mesh defining device for defining a map mesh consisting of mesh units, which contains the proposed travel route;
 - a traffic information extracting device for extracting traffic information relating
 - 10 to each mesh unit of the proposed travel route from a traffic information storage device in turn, in a manner such that traffic information relating to the mesh unit which includes the start or current position of the vehicle is obtained first;
 - a data amount monitoring device for monitoring a total amount of extracted information, where the data amount monitoring device terminates information extraction
 - 15 for the following mesh units when the total amount becomes equal to or larger than a predetermined value; and
 - a data sending device for sending the extracted traffic information to a vehicle navigation device built into the vehicle.
- 20 2. A vehicle navigation server as claimed in claim 1, wherein the traffic information sent to the vehicle navigation device is selectable for each of information categories, and traffic information belonging to at least one information category which is selected freely or in advance is extracted and sent to the vehicle navigation device.
- 25 3. A vehicle navigation server as claimed in claim 1, wherein the traffic

information sent to the vehicle navigation device is a combination of detailed information about a section from the mesh unit which includes the current or start position of the vehicle to a predetermined one of the mesh units and simplified information about the remaining mesh units following the predetermined mesh unit.

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4. A vehicle navigation server as claimed in claim 2, wherein the traffic information sent to the vehicle navigation device is a combination of detailed information about a section from the mesh unit which includes the current or start position of the vehicle to a predetermined one of the mesh units and simplified information about the remaining mesh units following the predetermined mesh unit.

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5. A vehicle navigation server as claimed in claim 1, wherein the traffic information is extracted for each mesh unit in order from the mesh unit closest to the vehicle to the mesh unit furthest from the vehicle.

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6. A vehicle navigation server as claimed in claim 2, wherein said at least one information category is selected in advance by a passenger of the vehicle.